CLAIMS:

1. An electronic device, comprising a band separating unit (1) comprising a first port (2), a second port (3) and an antenna port (4), and a first band-pass filter (5) connecting the first port (2) and the antenna port (4), and a series arrangement connecting the second port (3) and the antenna port (4), the series arrangement comprising a second band-pass filter (6) that includes a ladder circuit with shunt (13) and series elements (11,12), of which series elements at least a first element (11) comprises a film bulk acoustic wave resonator (FBAR), characterized in that the first element (11) of the second band-pass filter has a parallel inductor (14) and in that the series arrangement comprises a frequency tuning element (7) between the antenna port and the second band-pass filter .

2. An electronic device as claimed in Claim 1, characterized in that the frequency tuning element (7) is a series inductor (7) .

3. An electronic device as claimed in Claim 1 or 2, characterized in that the band separating unit is a duplexer, wherein the first port (2) is a transmit port and the second port (3) is a receive port.

4. An electronic device (1) as claimed in claim 1, characterized in that the parallel inductor (14), together with the static capacitance of the first element (11) of the second band-pass filter (6), forms an antiresonant circuit in the Tx-band.

5. An electronic device (1) as claimed in claim 1 characterized in that this antiresonant circuit is tuned to correspond to the center frequency (f_{Tx}) of the Tx-band.

6. An electronic device (1) as claimed in one of the claims 2-5, characterized in that the series inductor (7), together with the static capacitance of the first element (11) of the second band-pass filter (6), forms a resonant circuit in the Rx-band.

7. An electronic device (1) as claimed in claim 6, characterized in that this resonant circuit is tuned to correspond to the center frequency (f_{Rx}) of the Rx-band.

8. An electronic device (1) as claimed in 1 or 3, characterized in that the inductors (7, 14) are integrated on a substrate carrier on which the silicon dice of the bulk acoustic wave resonators (11, 12, 13) are also mounted.

9. An electronic device as claimed in Claim 1, characterized in that the band separating unit is a triplexer, and in that the device is further provided with a third band-pass filter between the antenna port (4) and a third port, which third band-pass filter includes a ladder circuit with shunt and series elements, of which series elements at least a first element comprises a film bulk acoustic wave resonator (FBAR) and is provided with a parallel inductor, and wherein a further frequency tuning element is present between the antenna port (4) and the third band-pass filter.

10. An electronic device as claimed in claim 1 , characterized in that the parallel inductor (14) is integrated in the bulk acoustic wave resonator (11).

11. Use of a duplexer (1) as claimed in one of the foregoing claims 2-9 in a USPCS CDMA 1900 MHz system, in a 2G, 2.5G or 3G system or a multi-band phone.

12. Method of isolating an Rx-band and a Tx-band in a duplexer comprising a transmit port (2), a receive port (3) and an antenna port (4), and a first band-pass filter (5) connecting the transmit port (2) and the antenna port (4), wherein the first band-pass filter (5) includes a first ladder circuit with shunt (10) and series (8, 9) elements and a series arrangement connects the receive port (3) and the antenna port (4), wherein the series arrangement comprises a second band-pass filter (6) including a second ladder circuit with shunt (13) and series (11, 12) elements, wherein the elements (8, 9, 10, 11, 12, 13) of both the first (5) and the second (6) band-pass filter comprise a film bulk acoustic wave resonator (FBAR), the method being characterized in that

an antiresonant circuit blocks the transmission band at the entrance of the second band-pass filter (6), as its antiresonant frequency corresponds to the center frequency f_{Tx} of the transmission band and

a resonant circuit allows the receive band to pass, as its resonant frequency corresponds to the center frequency f_{Rx} of the receive band.